

# **Stormwater Management in Virginia: Amendments to Parts I, II, III, and XIII of the Virginia Stormwater Management Program Regulations**

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**\*State Parks \* Soil and Water Conservation \* Natural Heritage**  
**\* Outdoor Recreation Planning \* Land Conservation**  
**\* Dam Safety and Floodplain Management**  
**\* Chesapeake Bay Local Assistance**

# Key Points

- Stormwater runoff is a significant contributor to water quality problems in Chesapeake Bay and Virginia waters.
- Contributes to closing beaches, shellfish beds, downstream flooding, channel erosion, etc.
- Some localities have standards exceeding proposed state rules; many localities have NOT addressed stormwater runoff
- Nearly 4 year regulatory process
- One of most open and inclusive processes ever
- Virginia is not alone; EPA and many states are aggressively addressing pollution impacts from stormwater
- EPA establishing new accountability measures for states along with consequences for not meeting Chesapeake Bay pollution reduction milestones
- Regulations will be reviewed by EPA



## A Lot of Change Going On in the Bay States

<u>STATE</u>	<u>NEW REGS</u>	<u>NEW MANUAL</u>
<b>DC</b>	<b>YES</b>	<b>YES</b>
<b>DE</b>	<b>YES</b>	<b>YES</b>
<b>MD</b>	<b>YES</b>	<b>?</b>
<b>PA</b>	<b>NO</b>	<b>YES</b>
<b>VA</b>	<b>YES</b>	<b>YES</b>
<b>WV</b>	<b>?</b>	<b>YES</b>

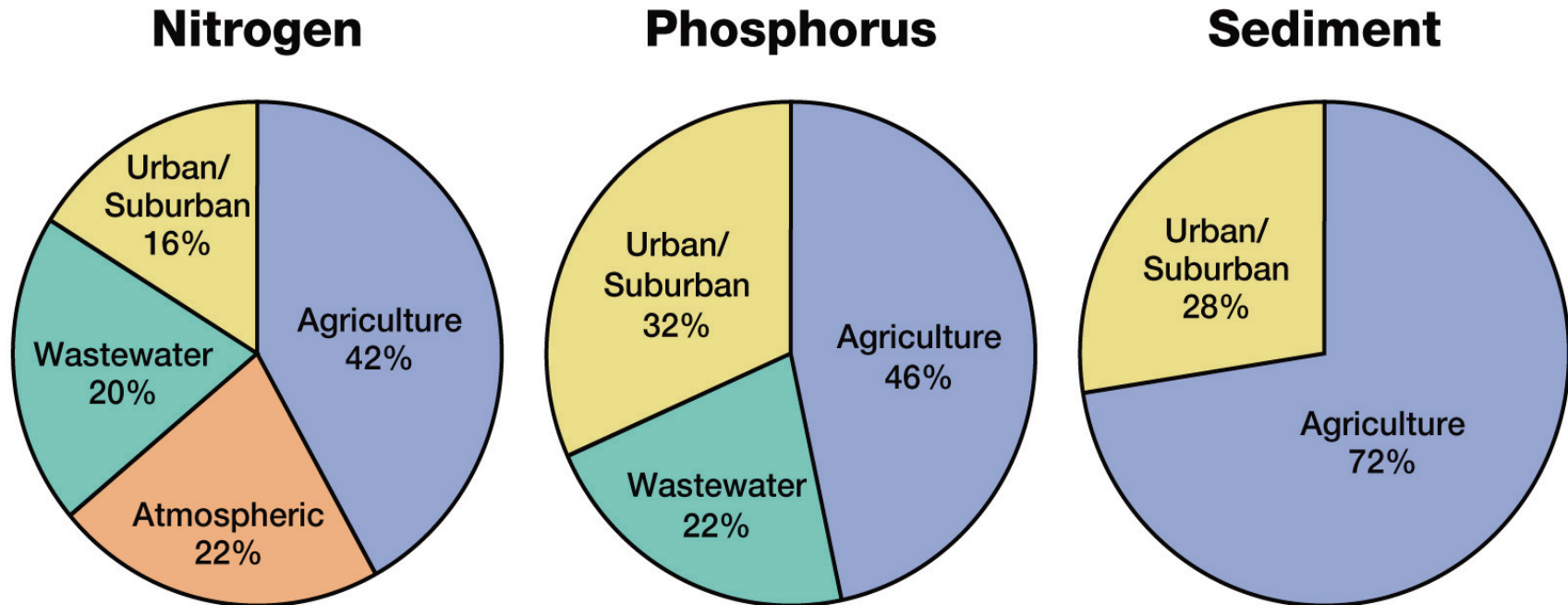


# Why regulate Stormwater?

- Regulated for 20 years in areas east of I-95 covered by Bay Act or Larger Municipalities covered by federal MS4 permit. No local programs statewide
- Actual water quality monitoring still showing declines in stream health
- Today's standards still result in significant flooding and channel erosion
- Involves treating runoff during construction as well as long-term runoff post construction
- Concerns both Water Quality (pollutants carried off in SW runoff) and Water Quantity (volume and runoff velocity creating downstream flooding and channel erosion)
- Addressing stormwater management is key component to improving VA's rivers, streams, lakes, and Chesapeake Bay (along with addressing impacts from agriculture, point sources, and air deposition)
- Regulations aimed at reducing the impacts from new construction; even more stringent regulations would be required to have no impact



# Nutrient and Sediment Sources



SOURCE: EPA Chesapeake Bay Program "State of the Chesapeake Bay Program: Summary Report to the Chesapeake Executive Council" 11/20/08.

- Pollutant loads from developed and developing lands continue to increase while loads from other sources are decreasing. (In 1985: 5% Total Phosphorus)

# State and Federal Authority



## VA Stormwater Management Act (HB 1177) - 2004

- Consolidated into DCR and Virginia Soil and Water Conservation Board.
- Was administered by 4 boards, 3 state agencies.
- Board has authority to..."permit, regulate, and control stormwater runoff in the Commonwealth...and otherwise act to ensure the general health, safety and welfare of the citizens of the Commonwealth as well as protect the quality and quantity of state waters from the potential harm of unmanaged stormwater".
- Board is authorized to:
  - adopt regulations that specify minimum technical criteria
  - establish minimum design criteria to control nonpoint source pollution and localized flooding
  - encourage low impact development designs, regional and watershed approaches, and nonstructural means for controlling SW
  - promote the reclamation and reuse of SW to protect state waters and public health and to minimize the direct discharge of pollutants into state waters
  - establish a statewide permit fee schedule set at a level sufficient to carry out its responsibilities under this article.

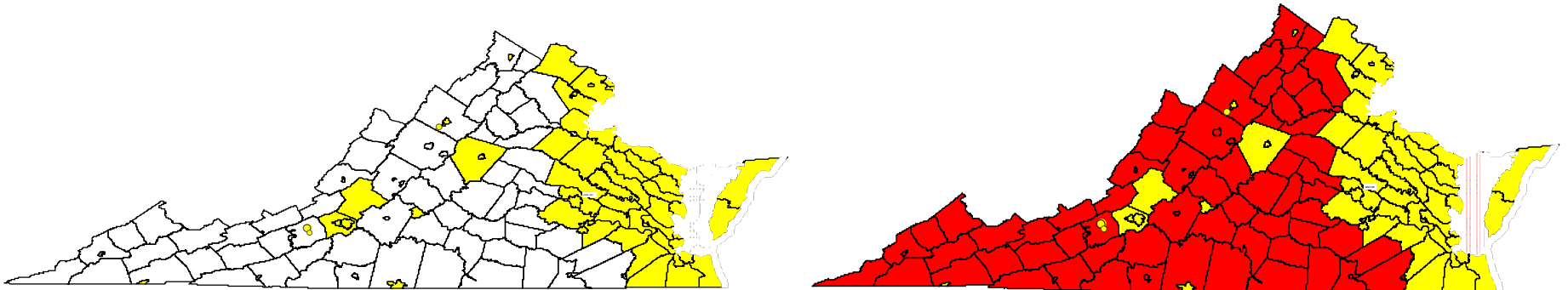
## Federal Clean Water Act

- Received EPA authorization to administer federal CWA program 1/29/05
- Involves both new construction and MS4 systems

## Future administration of construction stormwater programs in VA

Localities with MS4 permits and localities within the CBPA Area must adopt a local stormwater management program. (yellow)

All other localities may elect to adopt a local SW construction program (Opt-in). Otherwise, DCR will operate a program within a locality. (red)



# Regulatory Process

- Process started December 2005
- One of the most inclusive and open regulatory processes
- Over 50 public meetings to develop regs and supporting documents
- 2 Technical Advisory Committees plus subcommittees
- A series of design charrettes (over 400 attended)
- Established BMP Clearinghouse with Virginia Water Resources Center, VT
- Worked with nationally-acclaimed Center for Watershed Protection and the Chesapeake Stormwater Network to develop Runoff Reduction Methodology and new and updated SW practice design specifications





- Contracted with the Department of Agricultural and Applied Economics at Virginia Tech to conduct an economic impact analysis
- Reviewed site design analyses
- Developed guidance to address the use of stormwater nutrient offsets
- September 2008, Virginia Soil and Water Conservation Board authorized DCR to go to public comment
- Legislation in 2009 session to delay effective date to July 2010 and give localities more time to adopt
- Public Comment Period (Summer 2009)
  - 5 public hearings across the state
  - Over 3400 public comments
  - Over 50 additional meetings with groups and individuals
  - Director held two “Sounding Board” meetings with key stakeholders
- Board meeting and public comment Sept. 17
- Final Action October 5, Regulations suspended to allow for an additional 30-day public comment period



## Part II: Technical Criteria

- Criteria that will be employed by locality-run stormwater programs and by DCR when it administers a program.
  - Two major components:
    - Water Quality
    - Water Quantity



## Part III: Local Construction SW Programs

- Contains requirements for locality-administered & DCR-administered programs
  - Locality adoption projected to occur between October 2011 and April 2012
- Also contains local program authorization and review procedures to be used by the Virginia Soil and Water Conservation Board



## Part XIII: Fees

- Code of Virginia requires stormwater program to be funded by permit fees
- Fees proposed to be established at a level sufficient to support administration of local programs
- Minimum 70% go back to local program; Proposal will return 72% to localities and remainder to DCR for program implementation
- Scaled based on acreage of project



# Addressing Public Comments

## **Should same water quality standards apply to Ches. Bay and the Southern Rivers?**

Board Adopted:

- Separate standards should apply (0.28 standard in Bay region; 0.45 for non-Bay areas)
- Localities may elect to use a stricter standard. (ex: Swift Creek Reservoir 0.22)

## **Should same standards exist for small sites and redevelopment sites?**

Board Adopted:

- Small Sites (less than 1 acre disturbance) would be held to the statewide 0.45 standard
- Redevelopment sites disturbing less than 1 acre would be held to the 10% standard, rather than 20%



# Addressing Public Comments

## **Will applying the stormwater standards in Urban Development Areas affect growth patterns?**

- Stormwater requirements are only one of many factors affecting growth patterns.
- Within a UDA, provide locality with flexibility to establish a standard between 0.28 and 0.45 in order to promote smarter growth with board approval
- UDA standards can be based on density, level of imperviousness, mixed-use and transit oriented development potential, proximity to the Chesapeake Bay or local waters of concern, presence of impaired waters, etc.



# Addressing Public Comments

## **Will the State allow for additional offsite compliance options?**

- Current proposal includes 3 offsite options (pro-rata, watershed stormwater management plan, and developer site)
- 4th added by 2009 GA (nutrient offsets certified by Nutrient Credit program at DEQ)

Board Adopted:

- 5th Option: New State-level Buy-Down
- Developer's discretion to comply onsite or pay difference at a set fee (\$15,000 in UDA or \$23,900 elsewhere)
- May be used where other options not available or if locality allows
- Use funds based on Board priority for local urban SW improvements and retrofits (at least 50% of funds); purchase certified offsets; long-term agricultural conservation practices.



# Addressing Public Comments

## **Should the final regulations provide for Grandfathering of existing projects?**

- Not specifically addressed in current proposal
- However, anyone obtaining coverage under the existing Construction General Permit will be held to today's standards until the end of permit cycle on June 2014

### Board Adopted:

- Establish new section on Grandfathering that includes vesting concepts
- Grandfather projects that:
  - Meet specified local government vesting requirements by July 1, 2010; and
  - Obtain SW permit coverage by July 1, 2010
- Project would be grandfathered to June 30, 2014
- If permit coverage is continuously maintained, the project will remain subject to today's existing criteria until June 30, 2019





# Inspection Requirements

- **Concern raised by local governments**

Board Adopted:

- BMPs designed to treat stormwater from individuals lots are not subject to inspection requirements (once every five years.) Locality may propose strategy for such lots including education, periodic inspection or other methods.



# Water Quantity

## Concerns about stringent water quantity; channel protection and flood protection provisions

Board Adopted:

- “Good pasture standard” when flowing to an unstable channel unless pre-existing condition is forest, then forest standard
- Exception for redevelopment (<5 acres) or <1 acre new development



# Fees

## *Concern about adequacy of fees to administer local programs*

- Qualifying local program may charge higher fees upon demonstration of need to the board.



# Cost Considerations

- All project cases studied were able to achieve requirements
- Costs vary considerably due to site factors (ex: soils and topography) and local provisions
- Early site assessment important to reduce costs
- Costs of addressing water quality impairments after-the-fact exceed the costs of addressing SW during development.
- Lower costs from greater varieties of BMPs and increased BMP efficiencies
- Offsite options will reduce the costs of compliance
- VA Tech analysis did not take into account more recent offsite options or board adopted amendments



# Remaining Process

1. October 5: Adoption by Board and suspension for additional comment on changes adopted following public comment period
2. Public comment begins Oct 26 through November 25 on board adopted changes
3. Board meets in December for final action
4. July 2010: Effective Date but on-the-ground impact is phased-in when local program adopted
5. October 2011-April 2012: Approval of local programs by Board



# More Info:

Regs:

<http://www.dcr.virginia.gov/lr2d.shtml>

Clearinghouse website:

<http://www.vwrrc.vt.edu/swc/>

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